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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/719,777	11/21/2003	Tina L. Grubb	98-70E	2884

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EXAMINER

FEELY, MICHAEL J

ART UNIT	PAPER NUMBER
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1712

DATE MAILED: 08/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/719,777

Applicant(s)

GRUBB ET AL.

Examiner

Michael J. Feely

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 May 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3,5,6,8-16 and 58-62 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 8-16,59,61 and 62 is/are allowed.
- 6) ☒ Claim(s) 1-3,5,6,58 and 60 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Priority

Claims 1-3, 5, 6, 8-16, and 58-62 are pending.

Terminal Disclaimer

1. The terminal disclaimer filed on May 19, 2005 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of US Pat. No. 6,677,032 has been reviewed and is accepted. The terminal disclaimer has been recorded.

Double Patenting

2. The rejection of claims 1, 5, 6, 58, and 60 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 3, and 6 of U.S. Patent No. 6,677,032 has been overcome by a timely filed terminal disclaimer.

3. The rejection of claims 8, 10-16, 59, and 61-62 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 7, 9-14, and 16-20 of U.S. Patent No. 6,677,032 has been overcome by a timely filed terminal disclaimer.

4. The rejection of claims 58-62 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 6, 9, 13, and 16 of U.S. Patent No. 6,346,292 has been withdrawn.

Previous Claim Rejections - 35 USC § 102

5. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

6. The rejection of claims 1-3, 5, 6, 58, and 60 under 35 U.S.C. 102(b) as being anticipated by Savin (US Pat. No. 5,677,367) has been withdrawn.

New Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1-3, 5, 6, 58, and 60 are rejected under 35 U.S.C. 103(a) as being unpatentable over Siminski (US Pat. No. 5,981,086) in view of Reiter et al. (US Pat. No. 6,254,751).

- The following rejection applies to the first embodiment of claim 1, wherein (I) is: (i) a resin comprising A) an epoxy resin plus B) a polyhydroxyl functional cross-linker having a hydroxy equivalent weight of from 200 to 500.

Regarding claims 1, 2, 5, 58, and 60, Siminski discloses: **(1)** a chip resistant and corrosion resistant coating on high tensile steel produced from a powder coating composition (Abstract), said composition comprising (I) 100 weight parts of (i) a resin comprising A) an epoxy resin (Abstract; column 2, lines 5-35) plus B) a crosslinker (Abstract; column 2, line 36-38);

(2) wherein said epoxy resin is a bisphenol A epoxy resin (column 2, lines 5-9); **(60)** a method for coating a high-tensile steel surface to provide a chip resistant coating according to claim 2 (Abstract) comprising applying said coating composition to said surface, and heating said coating composition to form a coating (column 1, lines 51-59);

(5) wherein said composition contains at least 200 weight parts of zinc powder (column 2, lines 39-53); and

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(58) a method for coating a high-tensile steel surface to provide a chip resistant coating according to claim 1 (Abstract) comprising applying said coating composition to said surface, and heating said coating composition to form a coating (column 1, lines 51-59).

Siminski do not explicitly disclose the use of a polyhydroxyl functional cross-linker having a hydroxy equivalent weight of from 200 to 500; rather, they disclose, "Typically the coating powder will contain a curative for the epoxy, such as an amine curative, and/or an epoxy cure catalyst," (column 2, lines 36-38).

Reiter et al. disclose a powder coating composition for an electrically conductive substrate, wherein the powder coating preferably contains a bisphenol A or F epoxy resin (column 3, lines 49-56 and 62-67) and a *phenolic or amine-type* hardener (column 3, lines 49-56). Of these phenolic hardeners, preference is given to hydroxyl-containing bisphenol A or F resins having a hydroxy equivalent weight of from 180 to 600 (column 5, lines 14-36).

The teachings of Reiter et al. demonstrate that amine-type hardeners and phenolic-type hardeners are interchangeable equivalents in epoxy-based powder coatings. Furthermore, they demonstrate that of the phenolic hardeners, those having a hydroxyl equivalent weight of 180-600 are particularly preferred for these epoxy-based powder coatings. In light of this, it has been found that the substitution of equivalents known for the same purpose is *prima facie* obvious.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of then invention substitute the amine-type hardener for a polyhydroxyl functional hardener (with a hydroxy equivalent weight of from 200 to 500) in the composition of Siminski because the teachings of Reiter et al. demonstrate that amine-type hardeners and phenolic-type hardeners are

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interchangeable equivalents in epoxy-based powder coatings. Furthermore, they demonstrate that of the phenolic hardeners, those having a hydroxyl equivalent weight of 180-600 are particularly preferred for these epoxy-based powder coatings.

Regarding claims 3 and 6, the limitations of (ii) are not required in the first embodiment of claim 1; hence, these claims limitations are satisfied in the above rejection.

Allowable Subject Matter

9. Claims 8-16, 59, 61, and 62 are allowed.

Response to Arguments

10. Applicant's arguments, see page 10 of the response, filed May 19, 2005, with respect to the rejection(s) of claim(s) 1-3, 5, 6, 58, and 60 under 35 U.S.C. 102(b) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Siminski (US Pat. No. 5,981,086) and Reiter et al. (US Pat. No. 6,254,751) – *see above*.

11. Applicant's arguments, see pages 11-12 of the response, filed May 19, 2005, with respect to obviousness-type double patenting have been fully considered and are partially persuasive.

The argument based on the restriction requirement is not persuasive for the reasons set forth in the previous Office action.

However, after further consideration, the Examiner agrees that the "adduct" and the "core-shell" materials do not have a genus-species relationship. Previously, it was the

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Examiner's position that the "core-shell" material fell within the scope of a broader "adduct" material. After discussions with Mr. Merriam and further evaluation of U.S. Patent No. 6,346,292 (*see column 4, lines 28-58*), it has been determined that the "adduct" and the "core-shell" materials are entirely different entities, not having a genus-species relationship. The ODP rejection over U.S. Patent No. 6,346,292 has been withdrawn.

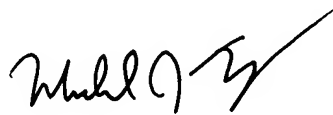
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Communication

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael J. Feely whose telephone number is 571-272-1086. The examiner can normally be reached on M-F 8:30 to 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski can be reached on 571-272-1302. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Michael J. Feely
Primary Examiner
Art Unit 1712

August 6, 2005